

0920803-080301

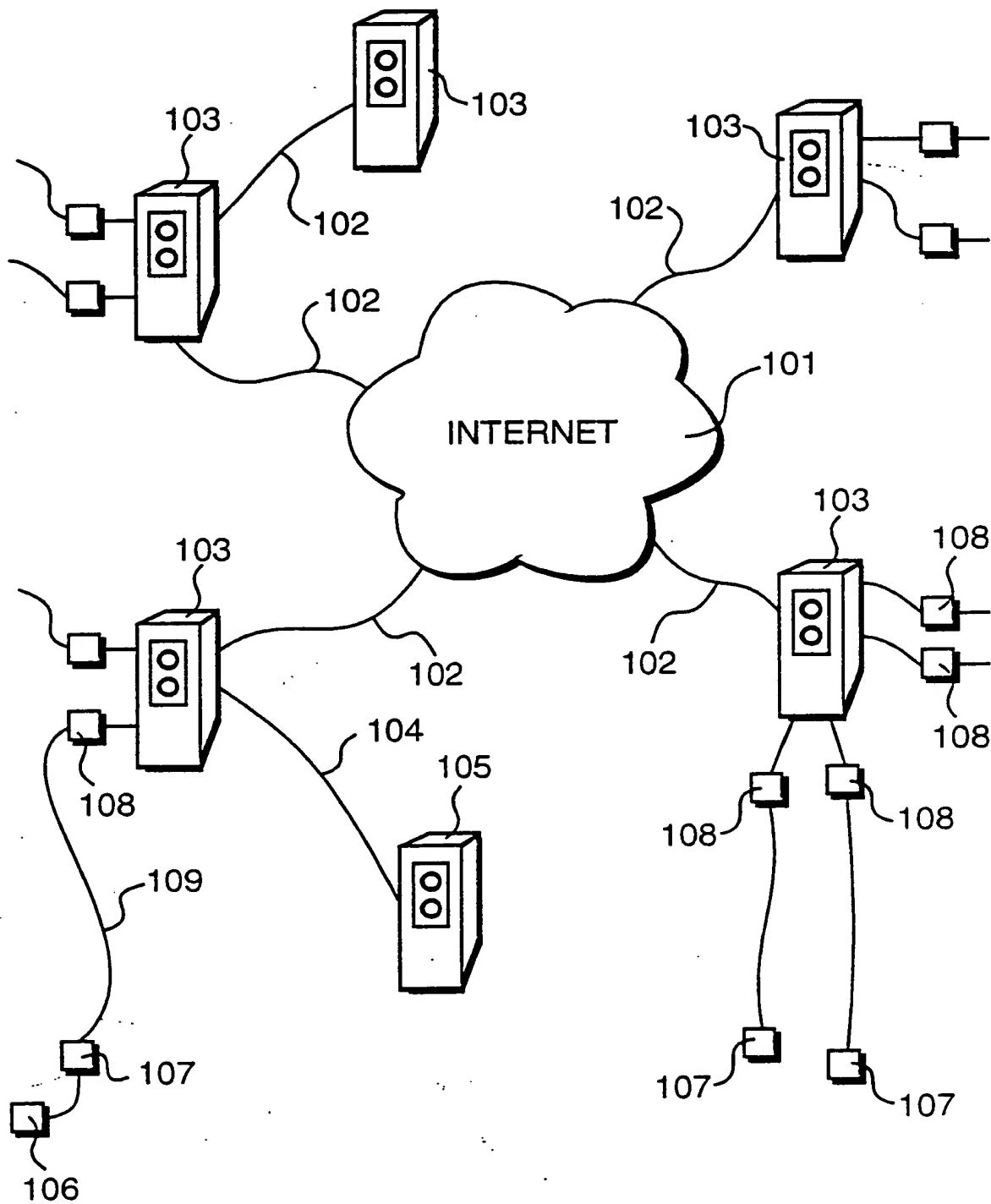


Figure 1

FIG. 2

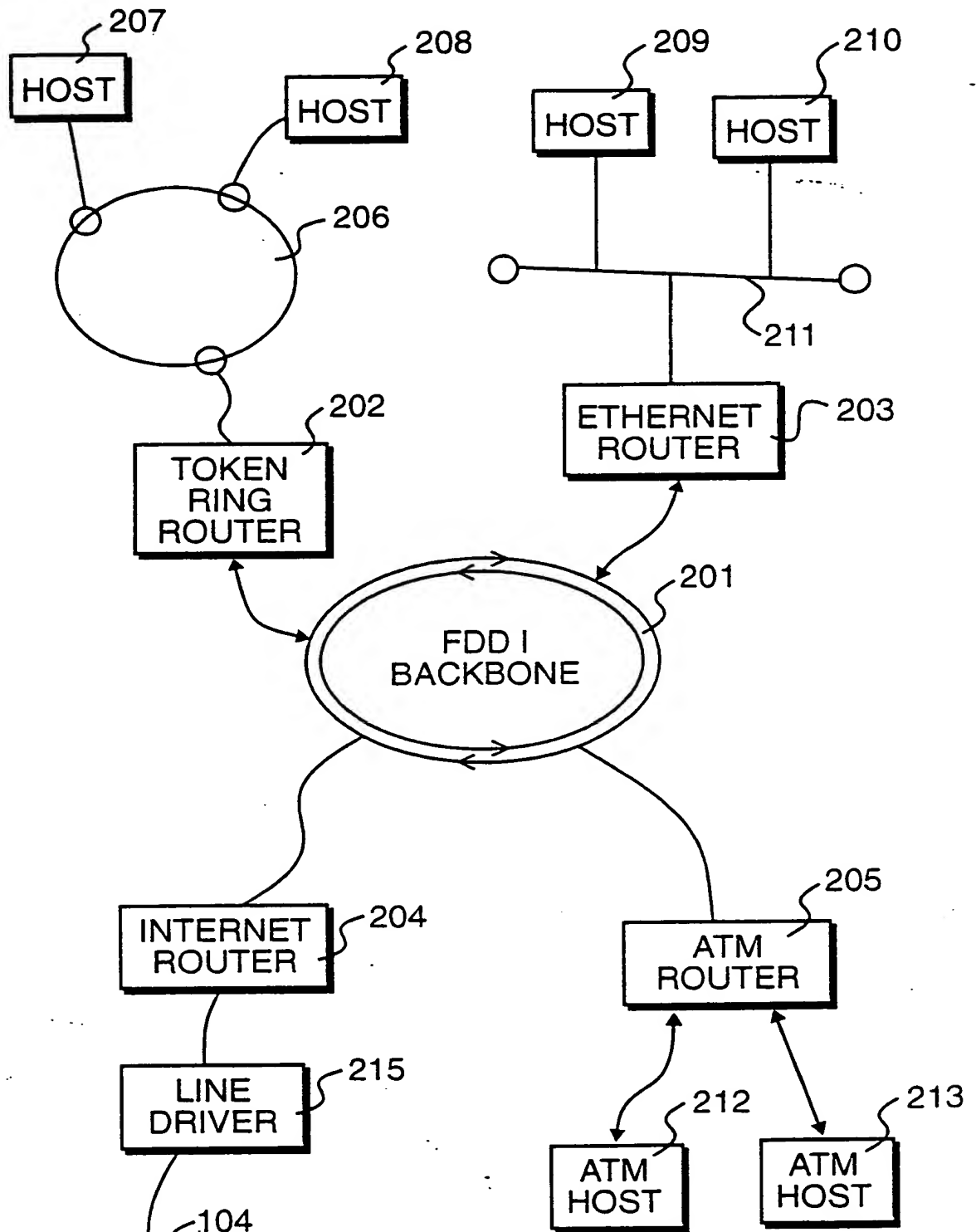


Figure 2

09020803-080301

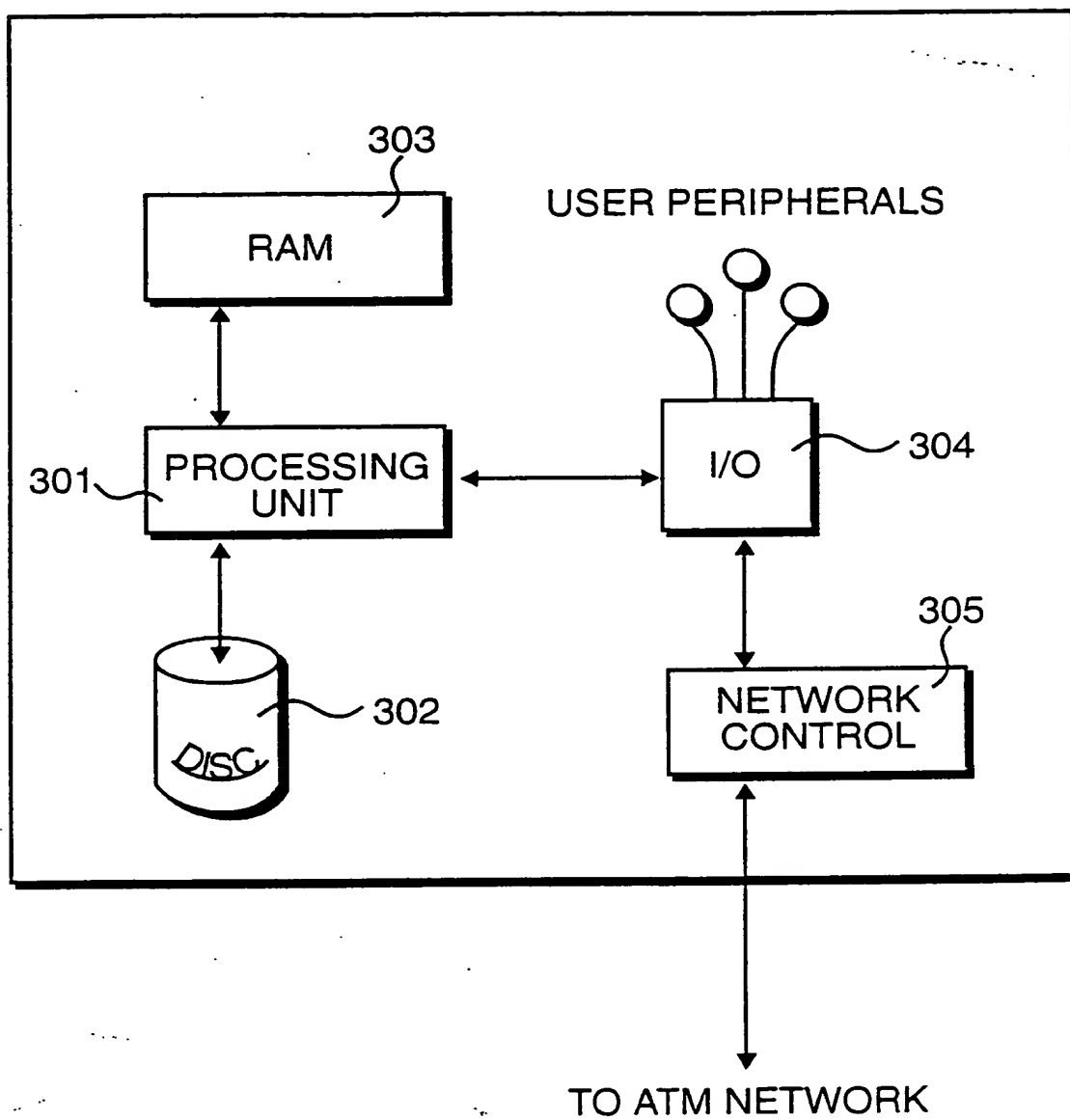


Figure 3

The diagram illustrates the components of the processing environment 402. At the center is the **PROCESSING ENVIRONMENT** (402). It is connected to several external components:

- HTTP DAEMON** (401): Connected to the processing environment via a curved arrow pointing towards it.
- ON-LINE PROCESSING** (405): Connected to the processing environment via a curved arrow pointing towards it.
- DATABASE** (406): Connected to the processing environment via a curved arrow pointing towards it.
- FILE STRUCTURE SOURCE** (407): Connected to the processing environment via a curved arrow pointing towards it.
- EXECUTABLE CGI-BIN PROGRAMS** (404): Connected to the processing environment via a curved arrow pointing towards it.
- PRE-DEFINED HTML FILES** (403): Connected to the processing environment via a curved arrow pointing towards it.
- I/O** (304): Connected to the processing environment via a straight double-headed arrow.

Figure 4

```

graph TD
    501[INITIALIZE SYSTEM] --> 502[WAIT]
    502 --> 503[INTERROGATE PORT]
    503 --> 504{URL WAITING ?}
    504 -- NO --> 504
    504 -- YES --> 505[PROCESS URL]
    505 --> 506[VALIDATE DECODED URL]
    506 --> 507{PREDEFINED FILE ?}
    507 -- YES --> 508[SUPPLY FILE]
    508 --> 509{ON-LINE PROCESSING ?}
    507 -- NO --> 509
    509 -- YES --> 510[PREPARE FILE ON-LINE]
    510 --> 511{CGI.BIN TO EXECUTE ?}
    509 -- NO --> 511
    511 -- YES --> 512[EXECUTE CGI.BIN]
    512 --> 514[RETURN ERROR MESSAGE]
    511 -- NO --> 514
    514 --> 502
  
```

Figure 5

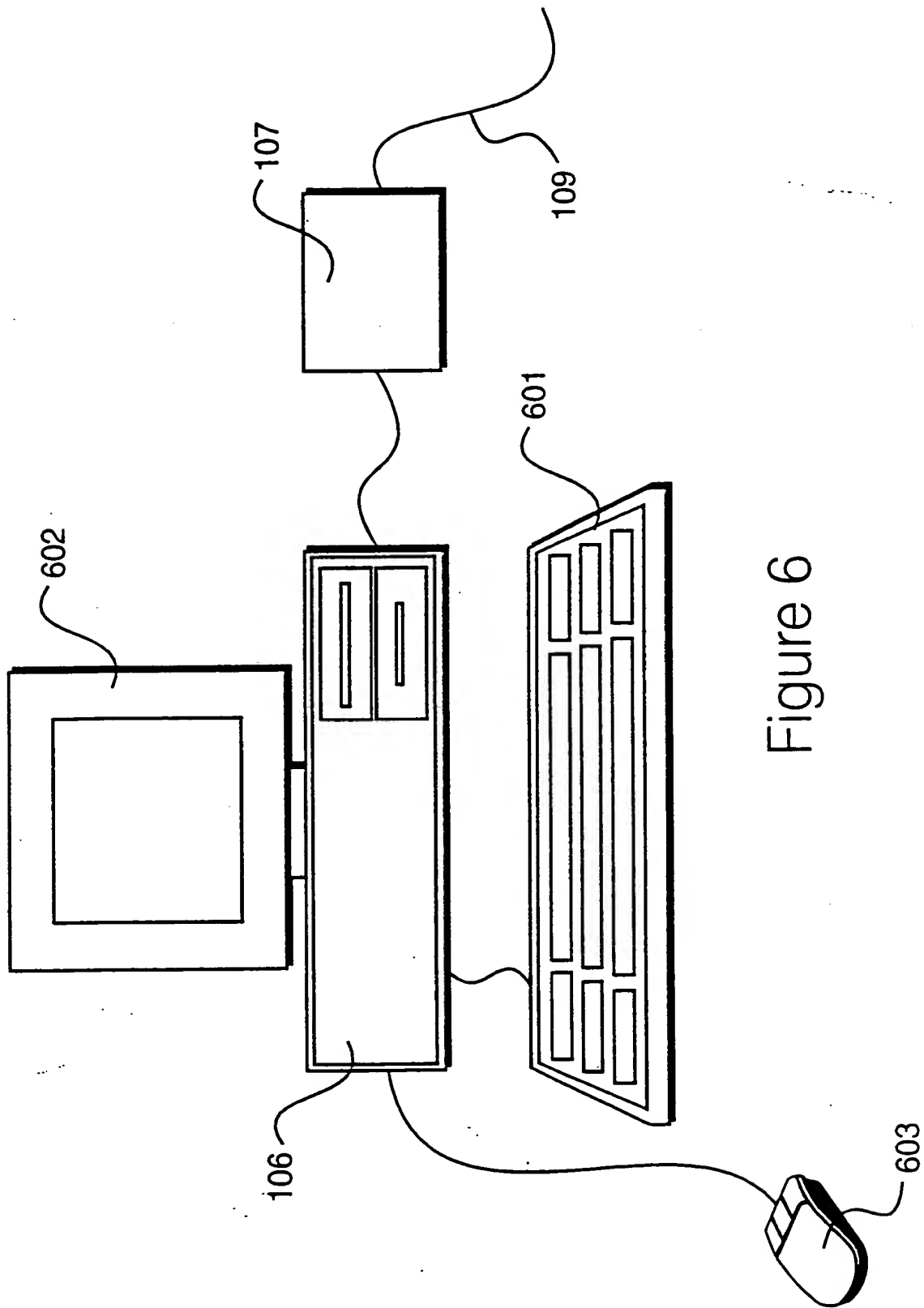


Figure 6

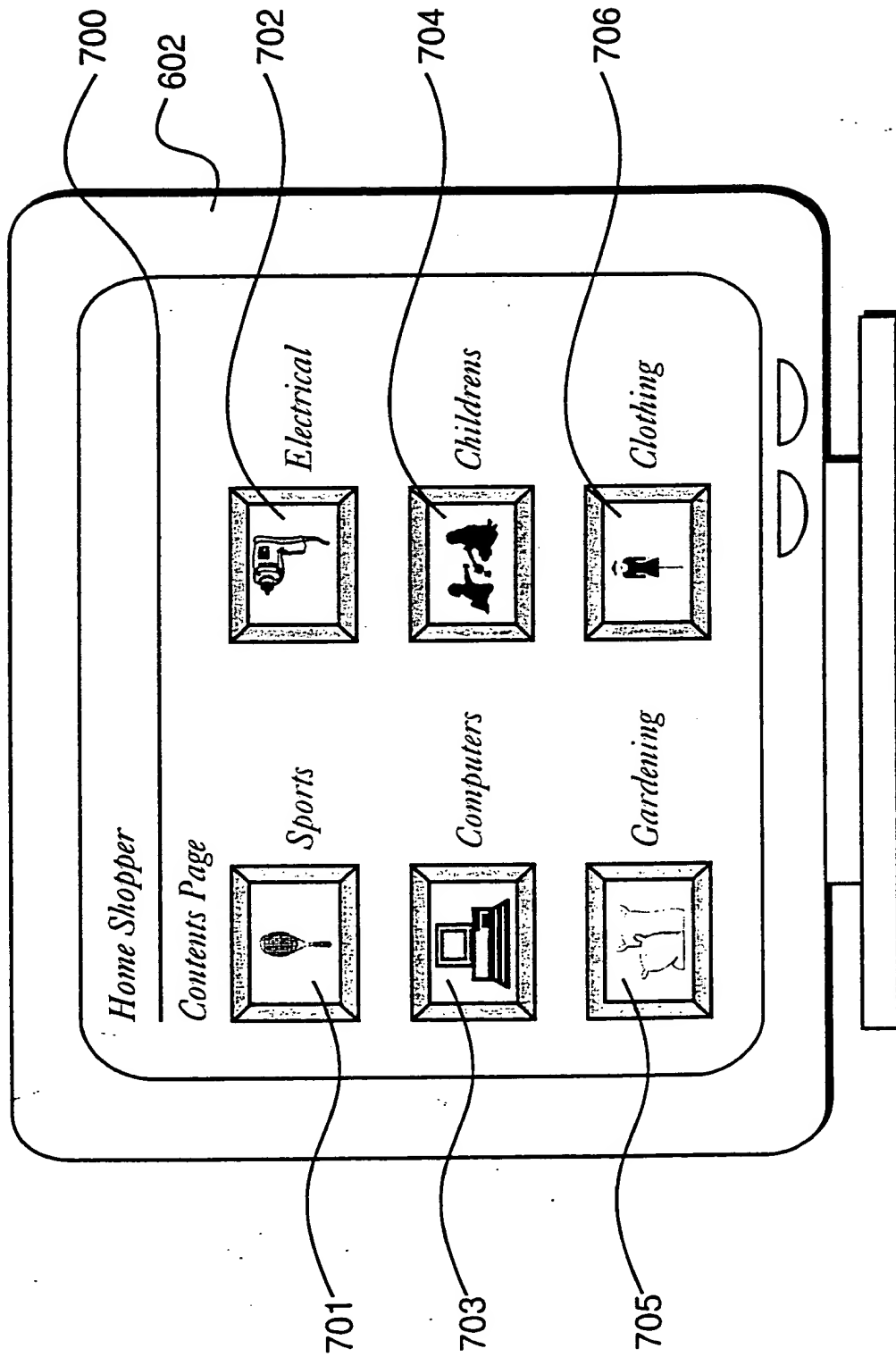


Figure 7

ASCII transmission to a browser

```

1 <HEAD><TITLE>Home Shopper</TITLE></HEAD>
2 <BODY>
3 <hr size=1>
4 <H1>Contents Page</H1>
5 <A HREF="http://localhost:8081/vdl/123456/1000/123/999">
6 Sports</A>
7 <A HREF="http://localhost:8081/vdl/123456/1001/123/999">
8 Electrical</A>
9 <p>
10 <A HREF="http://localhost:8081/vdl/123456/1002/123/999">
11 Computers</A>
12 <A HREF="http://localhost:8081/vdl/123456/1003/123/999">
13 Childrens</A>
14 <p>
15 <A HREF="http://localhost:8081/vdl/123456/1004/123/999">
16 Gardening</A>
17 <A HREF="http://localhost:8081/vdl/123456/1005/123/999">
18 Clothing</A>
19 <hr size=1>
20 <p>
21 </BODY>

```

Figure 8

09020803-000301

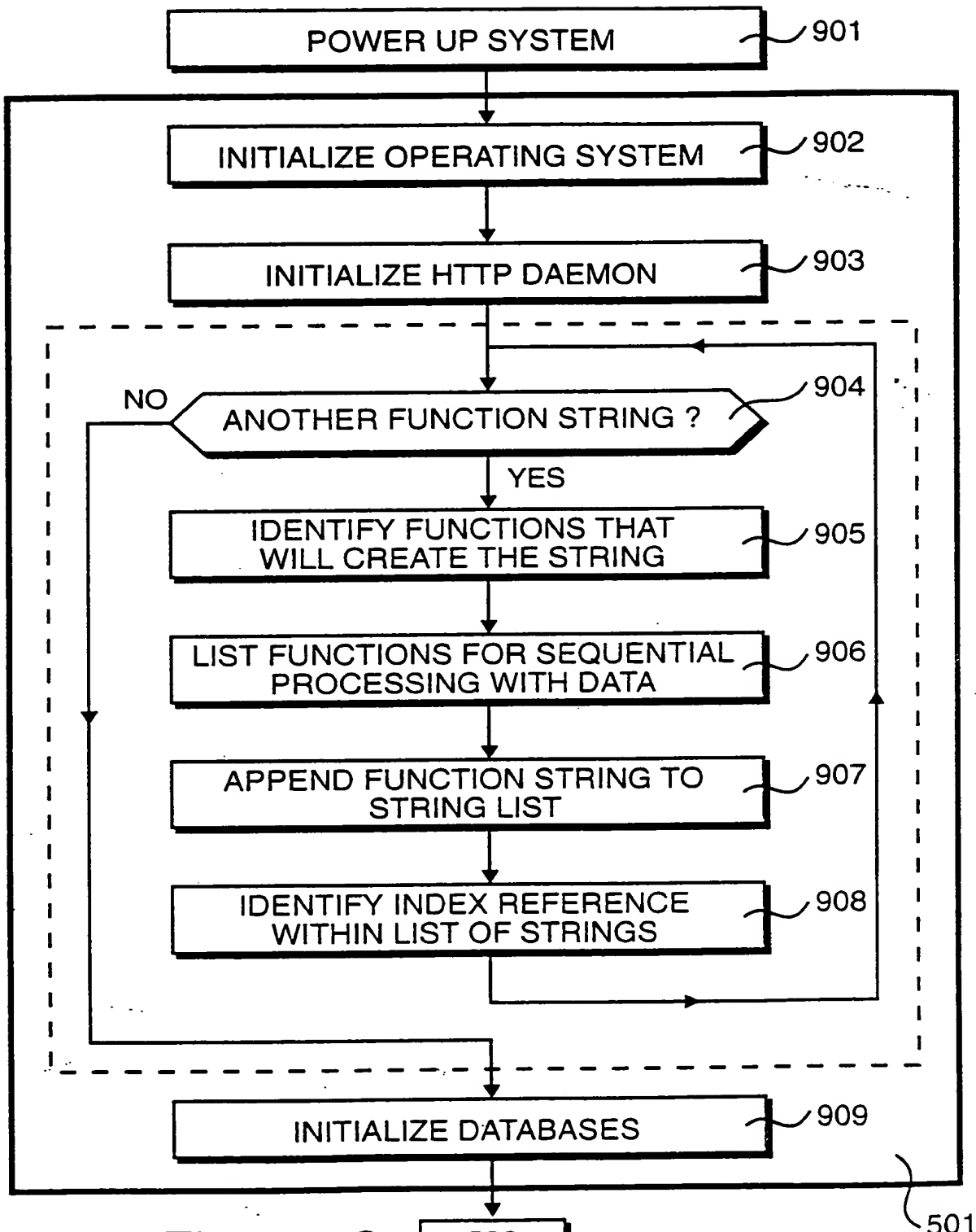


Figure 9

502

501

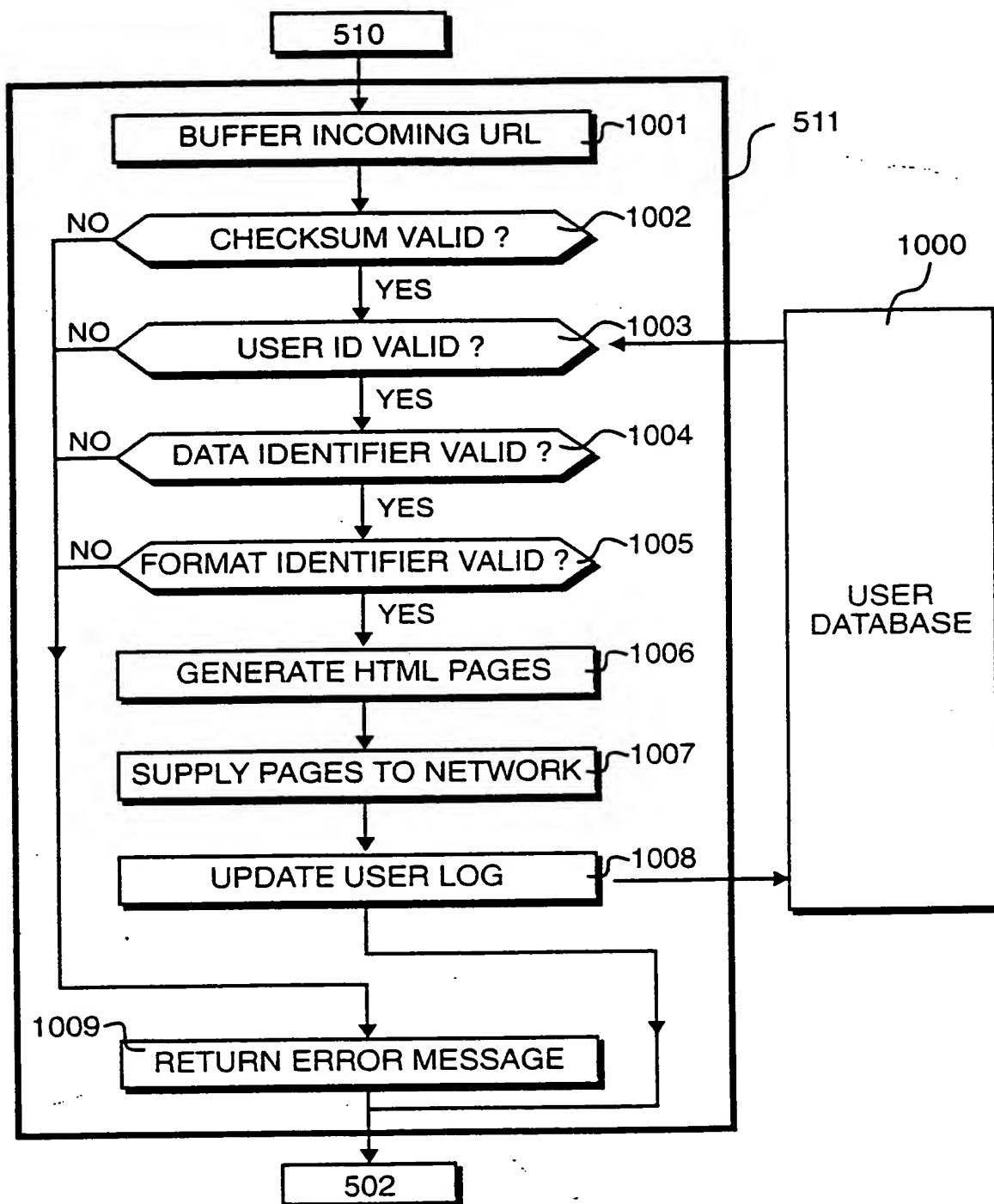


Figure 10

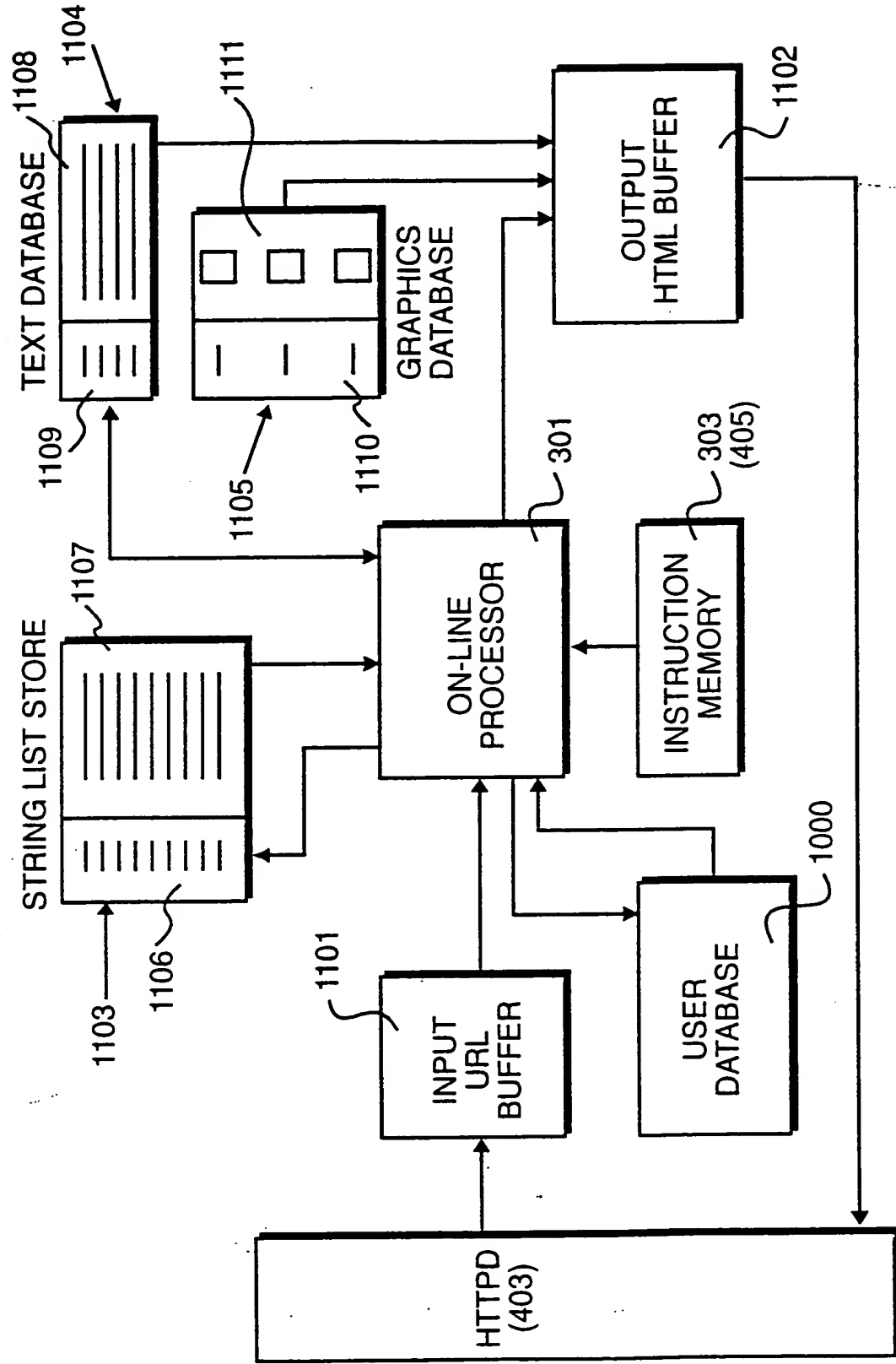


Figure 11

```

graph TD
    1005[1005] --> 1201[1201 IDENTIFY DATA STRING INDEX]
    1201 --> 1202[1202 READ DATA STRING]
    1202 --> 1203[1203 IDENTIFY FUNCTION STRING INDEX]
    1203 --> 1204[1204 READ FUNCTION STRING]
    1204 --> 1205[1205 EXECUTE FUNCTION STRING]
    1205 --> 1206{1206 ANOTHER FUNCTION STRING ?}
    1206 -- YES --> 1201
    1206 -- NO --> 1007[1007]
    subgraph 1006 [ ]
        1201
        1202
        1203
        1204
        1205
        1206
    end

```

Figure 12

```
graph TD
    1204[1204] --> 1301[1301 READ NEXT FUNCTION FROM FUNCTION STRING]
    1301 --> 1302[1302 EXECUTE FUNCTION STEP]
    1302 --> 1303[1303 WRITE HTML TO OUTPUT BUFFER]
    1303 --> 1304{1304 ANOTHER FUNCTION STEP?}
    1304 -- YES --> 1302
    1304 -- NO --> 1305{1305 ANOTHER FUNCTION?}
    1305 -- YES --> 1301
    1305 -- NO --> 1206[1206]
```

Figure 13

09920803-0003001

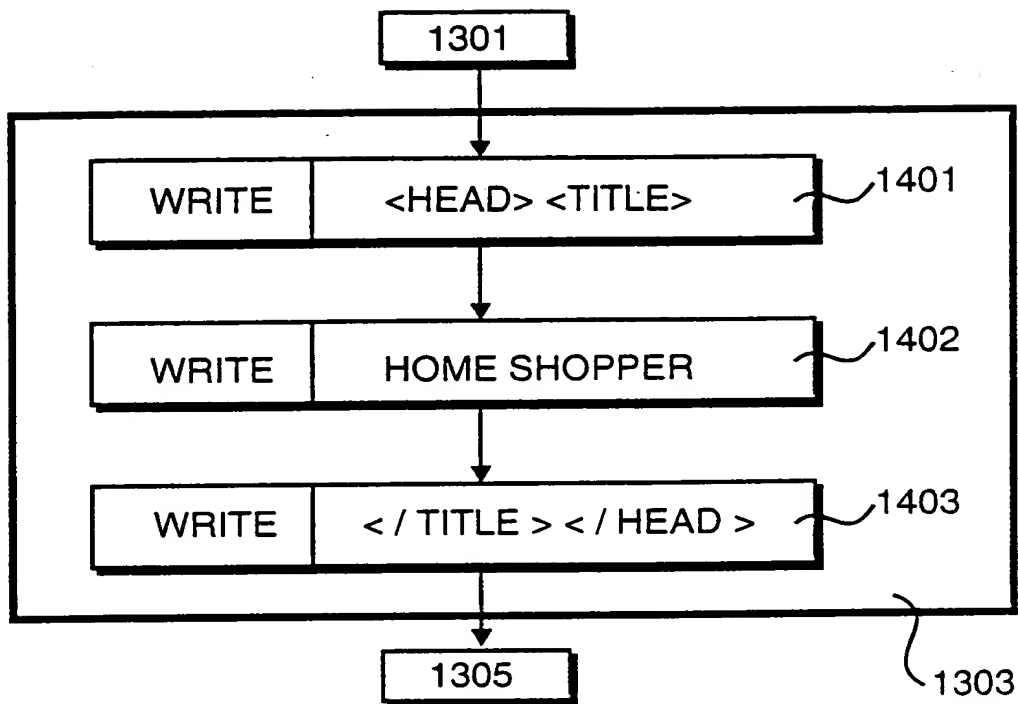


Figure 14